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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/723,031

11/26/2003

Eric S. Bornstein

borne40587

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07/05/2006

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EXAMINER

BUMGARNER, MELBA N

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 07/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/723,031

Applicant(s)

BORNSTEIN, ERIC S.

Examiner

Melba Bumgarner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacoby (5,328,365). Jacoby discloses a dental instrument comprising a hollow shank 14 having a rearward fitting, a forward head 16 including a contact region 28 and a window 46, the contact region being adapted for scraping, a source of infrared laser energy (column 14 line 1), the window being transmissive with respect to the laser energy, a fiber optic bundle (column 14 line 6) extending from the source through the fitting and shank, the instrument is capable of enabling simultaneous use to scrape and to remove diseased tissue (column 10 line 27, column 14 line 25) as best seen in figure 2a. Jacoby shows the laser device transmitting laser energy of Nd:YAG laser (column 14 line 34), which is known to lase in the infrared region, such as about 1060nm. Jacoby shows the contact region is a sickle scaler, curette, hoe scaler, chisel scaler, or file scaler (column 2 line 52).

3. Claims 1-6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Teumim-Stone (5,090,908). Teumim-Stone discloses a dental instrument comprising a shank having a rearward fitting, a forward head including a contact region and a sapphire window (figures 5-7), the contact region being adapted for scraping (column 6 line 56), a source of infrared laser energy (column 6 line 3), the window being transmissive with respect to the laser energy, a fiber

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optic bundle (column 6 line 18) extending from the source through the fitting and shank, the instrument enabling simultaneous use to scrape and to remove diseased tissue. Teumim-Stone shows the laser device transmitting laser energy of Nd:YAG laser, which is known to lase in the infrared region, such as about 1060 nm. Teumim-Stone shows the contact region which can be called a sickle scaler, curette, hoe scaler, chisel scaler, or file scaler. Teumim-Stone discloses a process for applying the dental instrument above to a surgical site (column 1 line 10) including the step of subjecting the surgical site simultaneously to (1) cutting and to (2) laser energy for trimming and cauterization to remove diseased tissue and to destroy residual bacteria (column 5 line 52 – column 6 line 58, column 1 line 42).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacoby in view of Andersen et al. (2003/0059379). Jacoby discloses a dental instrument that shows the limitations as described above; however, Jacoby does not show the laser energy of a diode laser in the approximate vicinities of 870 nm and 930 nm. Andersen et al. teach dental instrument comprising a multi-wavelength diode laser in the infrared region of about 800 to 980 nm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the laser device of Jacoby to have the diode laser of Andersen et al. in order to utilize a

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laser that is much less expensive than other lasers such as YAG and CO<sub>2</sub> as taught by Andersen et al.

6. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teumim-Stone in view of Andersen et al. Teumim-Stone discloses a dental instrument that shows the limitations as described above; however, Teumim-Stone does not show the laser energy of a diode laser in the approximate vicinities of 870 nm and 930 nm. Andersen et al. teach dental instrument comprising a multi-wavelength diode laser in the infrared region of about 800 to 980 nm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the laser device of Teumim-Stone to have the diode laser of Andersen et al. in order to utilize a laser that is much less expensive than other lasers such as the YAG and CO<sub>2</sub> as taught by Andersen et al.

#### *Response to Arguments*

7. Applicant's arguments filed have been fully considered but they are not persuasive. The claimed structural limitations of the instrument are shown in the prior art. In reference to Jacoby, it is noted that in the article claims, the recitation that the instrument is for performing a function is not a positive limitation but only requires the ability to so perform.

#### *Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melba Bumgarner whose telephone number is 571-272-4709. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached at 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melba Bumgarner  
Primary Examiner